

Heart TALK

Heart-healthy and Stroke-free Living with Dr. Amy L. Doneen, DNP, ARNP Vol 110 • September 2023



Thoughts from Dr. Amy

Autumn is a Good Time to Review and Update Your Vaccines



Fall has arrived — along with school, colds, coughs, and infections. Take the smart-steps now to keep yourself healthy and thriving!

We all love fall, with the return of routine, cozy seasonal meals and pumpkin spice everything! But along with the fun parts of the change in seasons, the return of fall also beckons the inevitable return of colds, coughs, and other upper respiratory infections. This month, we thought it would be timely to review the current guidelines for adult vaccination for the purpose of protecting vulnerable populations, protecting oneself against disease and from the cardiovascular and neurologic consequences of contracting common vaccine preventable illnesses.

The new kid on the block this year is the RSV vaccine. Unlike the vaccines we all have on our yearly “to-do list,” like the flu shot and more recently, COVID, the RSV vaccine is recommended only for a select portion of the adult pop-

ulation. **RSV (Respiratory Syncytial Virus)** is well known for its dangerous effects on the respiratory system of young children. However, the risk to a vulnerable adult population is lesser known. Adults over the age of 65 are at increased risk for dangerous complications after contracting RSV, including an exacerbation of underlying pathologies such as cardiovascular disease. At this time, there is no specific cure for RSV, and treatment is supportive in nature, which unfortunately results in thousands of deaths in older adults each year.

Thankfully, a single dose vaccine is now available that offers greater than 80% protection from the complications associated with RSV. The vaccine is not indicated for everyone — so who should be lining up to roll up their sleeves?

CONTINUED ON PAGE 4

Food Pairing: A Simple Strategy for Stabilizing Blood Sugar and Lowering Oxidative Stress

The more we learn about the integral role blood glucose and insulin levels play in our overall health, the more we feel the need to lean into the simple but effective strategies for stabilizing the levels of these vital biomarkers.

Drawing from recent scientific studies, and emerging research in the field of glycemic variability, we will explore the complex interplay between carbohydrates, healthy fats, dietary fiber and high-quality proteins. We will also discuss the connection between oscillating glucose levels and oxidative stress, illustrating the importance of focusing on lifestyle factors that promote glucose stability.

To begin, it is vital to first grasp the importance of maintaining consistent blood sugar levels. Beyond the immediate (though sometimes subtle) symptoms associated with variable blood sugar levels — such as fatigue, mood swings, anxiety and severe cravings — recent studies published in *JAMA* solidify the data supporting the idea that elevated glucose variability is a distinct risk factor for cardiovascular disease. Another study published in *Diabetes* revealed a concerning, though unsurprising, connection between fluctuating glucose levels and oxidative stress. Oscillating glucose levels, characterized by recurrent spikes and crashes throughout the day, appear to provoke oxidative stress, which is well known to contribute to cellular damage and inflammation within the body and the arterial walls. It is also interesting to note that mildly elevated blood sugar levels, though with lower variability (less ups and downs), resulted in lower levels of oxidative stress than was noted in those with lower average glucose levels but higher and more frequent fluctuations.

So, what can we do in our everyday lives to promote blood sugar stability and subsequently less oxidative stress? One strategy that has proven extremely helpful is **food pairing**. Recent studies have highlighted the significance of combining carbohydrates with healthy fats, fiber, and high-quality proteins to mitigate the glycemic impact of meals and snacks. Put simply pairing your carbs with a source of fat, fiber or protein will lower the glucose response to your food.

To understand this more fully, let's delve into the science behind each macronutrient group:

CARBOHYDRATES:

Carbs are your body's main energy source, but when eaten in isolation they can lead to rapid spikes and subsequent crashes in blood sugar levels.

HEALTHY FATS:

Fats found in healthy sources such as avocados, nuts, seeds, olive oil and fatty fish play a pivotal role in slowing carbohydrate digestion and absorption, curbing the glucose spike from a given meal. Fats also foster a sense of satiety, discouraging overconsumption and the resultant glucose spikes that occur with mindless eating.



• *September Recipe* • **Cozy Balanced Oatmeal Cookies**

Call it a “breakfast cookie” so you can enjoy one with your morning coffee!

INGREDIENTS

- 2/3 cup nut butter (natural, unsalted, no sugar added)
- 1/4 cup maple syrup
- 4 T olive oil, melted
- 1 large egg
- 2 t vanilla extract
- 1 t baking soda
- 1/2 t sea salt
- 1 1/2 t cinnamon
- 2 cups gluten-free old-fashioned oats
- 1 T chia seeds (optional)
- 1/2 cup almond flour
- 1 cup dark chocolate chunks or chips
- 1/2 cup raisins (optional)

A FOOD PAIRING APPROACH

Healthy Fat:

Nut butter, olive oil, almond flour, chia

Fiber:

GF oats, chia seeds

Carb:

Maple syrup, GF oats, dark chocolate, raisins

Protein:

Nut butter, egg, almond flour



Photo by Delaney Van on Unsplash

DIRECTIONS:

1. Preheat oven to 350 degrees F. Line a baking sheet with parchment paper.
2. Combine nut butter and maple syrup in bowl of a stand mixer. Mix well. Add olive oil, mix again. Add egg and vanilla and mix again until combined.
3. Add GF oats, chia seeds, almond flour, cinnamon, baking soda and salt to the bowl. Mix on low until just combined. Gently fold in chocolate chunks (chips) and raisins if using.
4. Chill dough in refrigerator, covered, for at least 20 minutes.
5. Use a medium (1 1/2 tablespoon) scooper to scoop dough onto prepared baking sheet. Bake 11-12 minutes, until golden brown.
6. Allow to cool on baking sheet for 5 minutes prior to removal. Enjoy!

CONTINUED FROM PAGE 2

FIBER:

Dietary fiber, abundant in fresh fruits, vegetables and some whole grains, can act as a shield for the quick absorption and glucose spike often associated with eating carbs in isolation. Fiber helps to orchestrate a slow and gradual release of glucose into the bloodstream, fostering overall improvement in blood sugar levels throughout the day.

QUALITY PROTEIN:

Proteins, such as lean meats, beans, nut butters and some dairy products, help to curb glucose spikes and assist in blood sugar regulation by modulating the post-meal insulin response.

Pairing carbohydrates with your choice of healthy fat, fiber or quality protein is an extremely effective and intuitive method for promoting blood sugar stability. Simple examples of food pairing include eating an apple (carb) with peanut butter (fat/protein), a slice of toast (carb) with avocado (fat/fiber) or sprinkling chia seeds (fiber/fat) in your morning oats (carb).

While these examples are generally not challenging to orchestrate, it is important to remember that this approach

applies universally. Whether you are designing a well-balanced smoothie, crafting a beautiful pasta dish or preparing a hearty salad for family dinner, having a mental checklist of the components of a well-paired/balanced meal will help ensure your food is contributing to your overall health and well-being. For instance, that pasta dish may include a gluten-free pasta (carb) and marinara sauce (mostly carb). So to promote blood sugar balance, consider adding ground turkey (protein), steamed broccoli (fiber) or a handful of olives (fat). To that fruit smoothie, add half an avocado (fat/fiber) or a spoonful of almond butter (fat/protein) for a more stable response.

While pairing foods is not the only evidence-based strategy for stabilizing blood sugar levels, it is one of the most effective and easy to incorporate into everyday life. By promoting blood sugar balance throughout the day, we are not only lowering glycemic variability and the resultant mood swings and cravings, we are also able to positively impact levels of oxidative stress and systemic inflammation. So next time you reach for that banana, remember to give it a buddy. Your blood sugar will thank you later!



CDC

CONTINUED FROM PAGE 1

The vaccine is available to all adults over the age of 65 but should be most highly considered by those with chronic conditions affecting the immune system such as diabetes, COPD or significant cardiovascular disease.

As always, we highly recommend the annual **Influenza (Flu) vaccine** both for protection from the respiratory effects of the influenza virus, as well as the prevention of the inflammatory milieu associated with severe infection. Beyond protecting against seasonal influenza, a recent study published in *Neurology* found that regular influenza vaccination was associated with a lower risk for developing Alzheimer's Disease. While the mechanism of this association remains unclear, the finding illuminates the importance of flu vaccination for both respiratory and cognitive health. As a reminder, routine annual flu vaccination is recommended for all patients 6 months of age and older if no contraindication exists.

The Shingles (herpes zoster) vaccine is another relative newcomer on the vaccine scene. While the influenza vaccine has been found to decrease the risk of Alzheimer's Disease, an active shingles infection has been linked to an

elevated risk for stroke. A Harvard study published in 2022 by the *Journal of the American Heart Association* followed more than 200,000 adults without prior cardiovascular disease. The study found that those participants who endured a shingles infection during the study had a higher risk for stroke compared to those who had not had shingles. The shingles vaccine is currently recommended for individuals aged 50 years and older; due to the risk of stroke, we do highly recommend this vaccine for any eligible person.

The **Pneumonia vaccine** is another guideline-based vaccine we often get questions about. Currently, there are two types of pneumonia (pneumococcal) vaccines, the Pneumococcal Conjugate Vaccines (PCV13, PCV15 and PCV20), and the Pneumococcal Polysaccharide Vaccine (PPSV23/Pneumovax23). The Prevnar 13 or 15 vaccine is recommended for all children younger than 5 years old (given as part of a series) and for children 5-18 with medical conditions that increase their risk for severe disease. The Prevnar 20 vaccine is recommended for adults aged 65 and older and adults younger than 65 living with conditions

that predispose them to more severe disease. Pneumovax23 is given to children aged 2-18 who need it based on their risk profile, and to adults who have received Prevnar 13 or 15 in the past.

While the **COVID-19 vaccine** recommendations have been highly dynamic over the past few years, many specialists believe we will likely start to experience COVID much like other seasonal illnesses. Currently, the CDC continues to strongly encourage eligible individuals to receive vaccinations and boosters in accordance with the most current guidelines. The most updated version of the COVID vaccine should be available later this month, adding additional protection against the most current COVID variants.

This fall as you prepare to settle in for a cozier season, it is well worth your time to have a conversation with your healthcare provider about the best ways to protect yourself against the most common seasonal maladies. Vaccines serve as critical tools, along with diet, exercise, sleep, and stress reduction, to preserve health both by preventing disease and the inflammatory cascade that can be associated with severe illness.



Follow The Prevention Center on [Twitter](#) and [Facebook](#) for the latest news on heart health and wellness.

